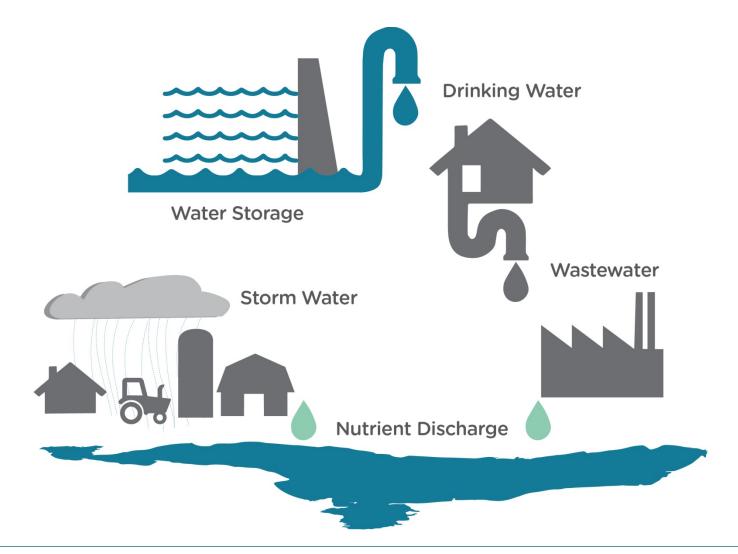




#### WATER INFRASTRUCTURE

Erica Brown Gaddis, PhD, Director

## **Water Infrastructure**





# **Growth and Water Quality**



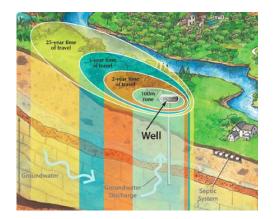
Wastewater Infrastructure



**Contaminant Sources** 



Storm Water Runoff and Infrastructure



Balancing source protection with development



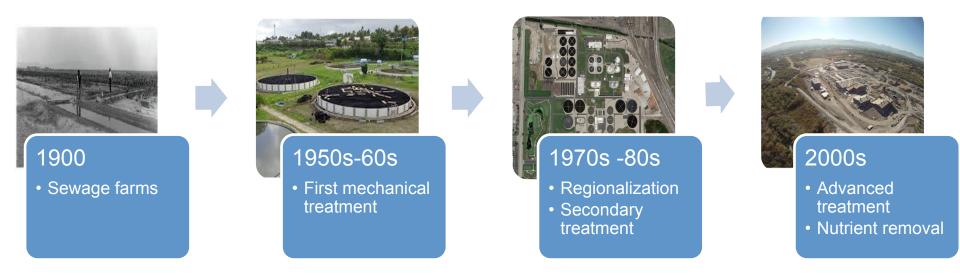
#### **Storm Water Infrastructure**

- ☐ Storm water infrastructure:
  - flood protection conveyance
  - pollution control features
- ☐ Significant source of pollution to Utah's urban waters.
- ☐ Urban storm water pollution will increase with urban growth.
- Retrofits are costly.





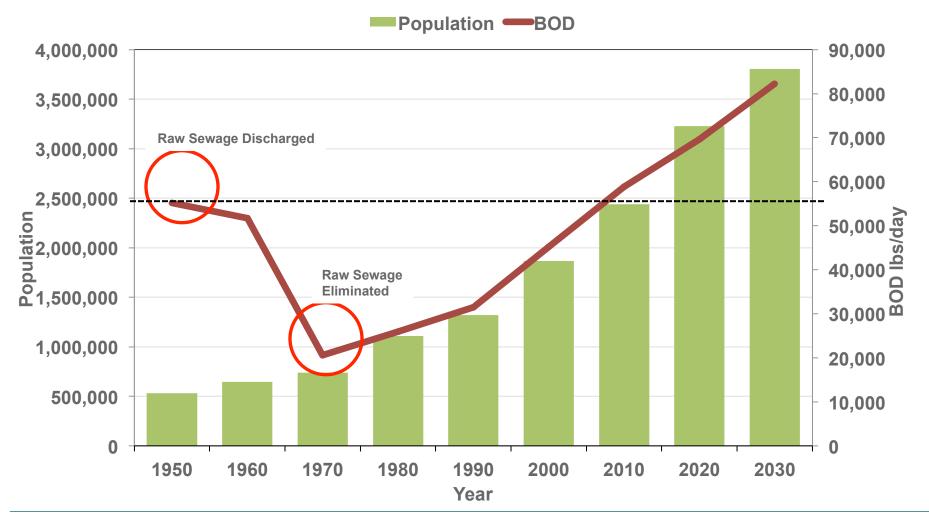
#### **Utah's Wastewater Infrastructure**



- 184 sewer systems in Utah half are non-discharging facilities
- 460 million gallons per day treated municipal wastewater discharged
- Oldest collection system: 1891 (Salt Lake City)
- Average age of collection systems: 1973



# Pollutant Loading from Wastewater





## Municipal Wastewater Planning Program

#### **2019 Survey**

- ☐ 100 facilities participated representing 86% of the state's wastewater
- □ \$2.1 billion in wastewater infrastructure needs by 2025
- ☐ 66% have completed a rate in the last five years
- ☐ Capital Improvement Reserve Funds sufficiency:

☐ 5 years: 26%

■ 10 years: 44%

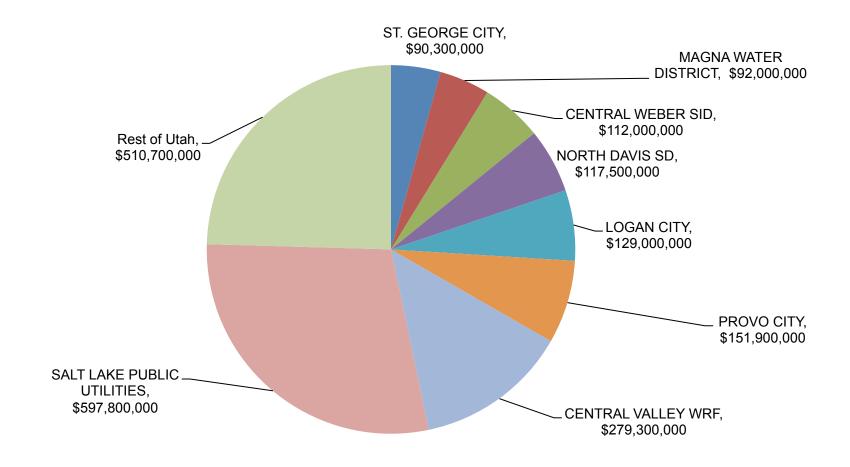
☐ 20 years: 55%



Photo credit: Leland Myers



#### Projected Wastewater Needs – \$2.1 to \$2.5 billion by 2025



Data source: Municipal Wastewater Planning Program Survey - 2019



## **Utah Water Funds**

Water Fund	Eligibility
Clean Water State Revolving Fund	Wastewater and storm water infrastructure
Drinking Water State Revolving Fund	Drinking water infrastructure
Community Impact Board Fund	Projects, including water, located in mineral producing counties
Rural Development Fund	Communities with <10,000 people
Water Resources Conservation and Development Fund	Water development, conservation, and irrigation
Water Infrastructure Restricted Account	Bear River and Colorado River Water Development
Agricultural Resource Development Loan Fund	Agricultural projects, including irrigation



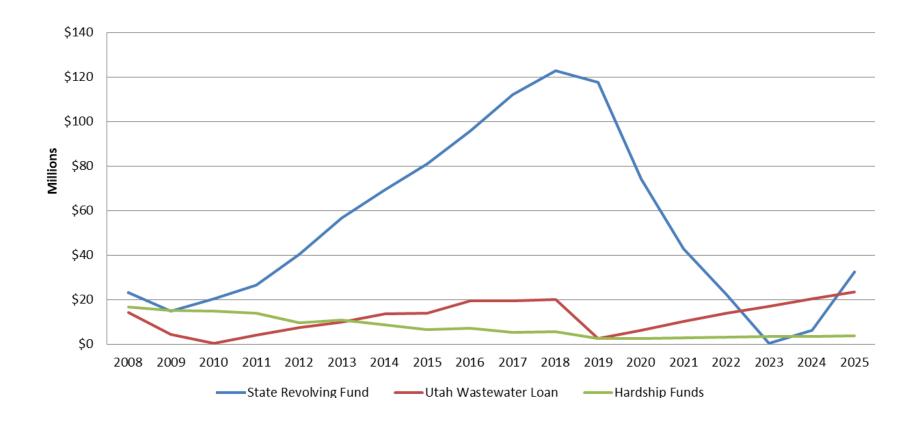
### Wastewater State Revolving Loan Funds



- ☐ Financing since 1983: \$1.1 billion
- Wastewater and sewer needs by 2025:\$2.1 2.5 billion
- ☐ Stormwater needs: **TBD**
- ☐ Available through 2025: **\$21 million**
- ☐ Stagnant federal and state funding
- Benefits of public financing
- □ Protects quality of Utah's receiving waters
- ☐ Interest reinvested in Utah's communities
- □ Provides hardship grant funds

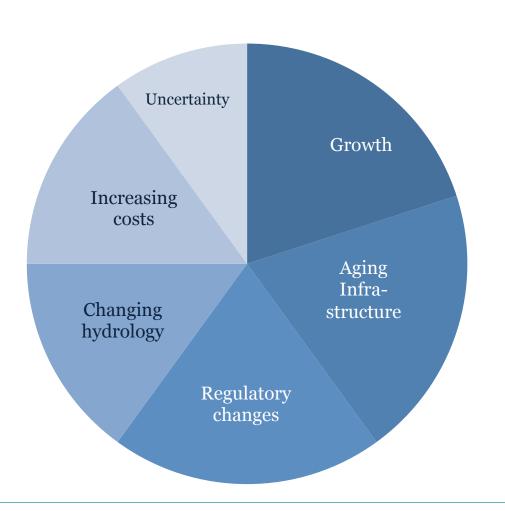


## **Loan and Grant Fund Balances**





# Comprehensive Wastewater Infrastructure Needs – 2060 projections



#### Timeline

- Fall 2019: High level estimate
- 2020: Detailed study

#### **Key Partners**

- Governor's office
- DNR
- Local partners
- Legislators



# **Take Home Messages**

- ☐ Utah's waters contribute to high quality of life in Utah
- ☐ Growth requires strategic investment in all elements of water infrastructure
- Water quality issues are complex and related to growth and water development
- Wastewater projects through 2025 will total \$2.5 billion with only \$21 million available in Clean Water SRF financing



Photo credit: Utah Homebuilders



# THANK YOU.

